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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,319	08/01/2003	Yariv Aridor	6727/1H383US2	7864
7278	7590	10/23/2006	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			THAI, HANH B	
			ART UNIT	PAPER NUMBER
			2163	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,319

Applicant(s)

ARIDOR ET AL.

Examiner

Hanh B. Thai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 7/26/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49-50, 58 and 62 is/are allowed.
- 6) ☒ Claim(s) 35-48, 51-57 and 59-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is Non-Final Office Action in response to the amendment filed on July 26, 2006. Claims 1-34 have been canceled. Claims 35-62 are pending in this application.

Response to Arguments

1. Applicant's arguments with respect to claims 35-62 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues, Liddy neither teaches nor suggests that “a neural network trained on one query could be used to answer another, substantially different query” (response 10/11/02, page 9, lines 11-13). The examiner respectfully disagrees because Liddy teaches the limitations of the claims. The Neural Network (Abstract of Liddy) is trying to answer any subsequent query. The training system (column 2, line 66 to column 3, lines 4, Liddy) response to the user query is different from the repeated query and (column 4, lines 29-59).

Applicant argues, Wical does not teach “a particular knowledge domain be defined and then that lexical affinities specific to that knowledge domain be determined and used in refining a search query” (response 10/11/02, page 10). The examiner respectfully disagrees because Wical teaches the limitations of the claims. By applicant's definition “the lexical affinities of a given term are other terms that are frequently found in proximity to the given term” (page 19, lines 29-31). Therefore, the Liddy's usage association is the same as Applicant's claimed proximity (column 2, lines 43-53). Another example is shown on query block 610 (Fig. 3), which includes the query terms (column 9, lines 34-53), also reading on the proximity.

2. Applicant's arguments with respect to claims 1-15, 17, 21-28 and 30-33 have been considered but have not been found persuasive.

Specification

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 35, 38-48, 51, 55-57 and 59-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Liddy et al. (U.S. 6,304,864) in view of De Bellis (U.S. 6,760,720 B1).

Regarding claims 35, 51 and 59, a method for searching a corpus of documents, comprising:

- Defining a knowledge domain (column 3, lines 15-17 and lines 60-64, Liddy);
- Identifying a set of reference documents in the corpus pertinent to the domain (column 2, lines 5-8, Liddy);
- Searching the corpus using the set of reference documents to find one or more of the documents in the corpus that contain information in the domain relevant to the first query (column 3, lines 56-60, Liddy).

Liddy, however, does not disclose adding at least one of the found documents to the set of reference documents for use in searching the corpus for information in the domain relevant to a second, subsequent query, which is substantially different from the first

query. De Bellis discloses a search-on-fly search engine for searching databases including the focusing or refining the search (abstract and summary, De Bellis) reads on “adding at least one of the found documents to the set of reference documents for use in searching”.

It would have been obvious to one of ordinary skilled in the art at the time the invention was made, to modify Liddy, as taught by De Bellis to derive the invention as claimed.

The motivation of doing so would have been to provide an efficient system that can save time and expense involved in searching a very large amounts of data (col.2, lines 23-28, De Bellis).

Regarding claim 38, Liddy/De Bellis combination discloses the method wherein inputting the first query comprises specifying one or more documents representative of the information to be found in the corpus (col. 4, lines 29-36, Liddy).

Regarding claim 39, Liddy/De Bellis combination discloses the method wherein searching the corpus comprises searching the corpus to find the documents that contain the information relevant to the query and ranking the found documents by comparing them to the set of reference documents (col. 11, lines 27-35, Liddy).

Regarding claim 40, Liddy/De Bellis combination discloses method wherein ranking the found documents comprises evaluating a textual resemblance between the found documents and the reference documents (col.11, lines 27-35 and lines 9-14, Liddy).

Regarding claim 41, Liddy/De Bellis combination discloses the method wherein ranking the found documents comprises assessing links between the found documents and the reference documents (column 11, lines 46-50, Liddy).

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Regarding claim 42, Liddy/De Bellis combination discloses the method wherein adding the at least one of the found documents comprises adding at least the document having the highest ranking (column 11, lines 42-46, Liddy).

Regarding claim 43, Liddy/De Bellis combination discloses in (Fig. 3A) the method wherein adding the at least one of the found documents comprises removing (70b) one of the documents from the set responsive to adding (70a) the at least one of the found documents (column 8, lines 43-49, Liddy).

Regarding claims 44 and 55, Liddy/De Bellis does not explicitly disclose the method comprising tracking a level of relevance of the reference documents to the queries, and wherein removing the one of the documents comprises removing one of the reference documents whose tracked level of relevance is low, but Liddy discloses the method of retaining the reference documents whose tracked level of relevant are high (column 11, lines 42-46). It would have been obvious to one of the skilled in the art to remove the low tracked level's relevance of the reference documents to enhance the language processor' speed.

Regarding claims 45 and 56, Liddy/De Bellis combination discloses the method wherein the corpus comprises at least a part of the World Wide Web, and the documents comprises Web pages, and wherein searching the corpus comprises conveying the query to one or more Web search engines (column 5, lines 57-67 and Fig 1, Liddy).

Regarding claim 47, Liddy/De Bellis combination discloses the method wherein identifying the set of reference documents comprises opening one or more files of a knowledge base on a computer in which data regarding the reference documents are saved (column 7, lines 37-56, Liddy).

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Regarding claim 48, Liddy/De Bellis combination discloses the method wherein identifying the set of reference documents comprises identifying the set of documents used by a first user in searching the corpus, and wherein opening the one or more files comprises copying the files for use by a second user in searching the corpus for information in the domain (column 11, lines 27-36). Please note that the examiner regarding the files as reading on Liddy's "tables".

5. Claims 36-37 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al. (U.S. 6,304,864) in view of De Bellis (U.S. 6,760,720 B1) and further in view of Wical U.S. (6,038,560).

Regarding claims 36-37 and 52-54, Liddy/De Bellis combination does not explicitly disclose the method wherein searching the corpus comprises finding lexical characteristics of terms in the reference documents and refining the search terms using the lexical characteristics. Wical, however, discloses these lexical characteristics (column 2, lines 43-50, Wical). It would have been obvious to one of ordinary skilled in the art at the time the invention was made, to modify Liddy, as taught by Wical, to identify relevant terminology (column 2, line 60, Wical).

6. Claims 46, 57 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al. (U. S. 6,304,864) in view of De Bellis (U.S. 6,760,720 B1), and further view of Bowman et al. (U. S. 6,006,225).

Regarding claims 46, 57 and 61, Liddy and De Bellis combination discloses all of the claimed limitation as discussed above, except the searching while the device is disconnected from the Web. Bowman, however, discloses these limitations on (column 2, lines 47-53, Bowman). It would have been obvious to one of the ordinary skilled in the art at the time the

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invention was made to modify the system of Liddy and De Bellis, as taught by Bowman, to allow the user to refine the query (column 2, lines 1-2, Bowman).

Allowable Subject Matter

7. Claims 49-50, 58 and 62 are allowed over the art of record.
8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose or suggest "refining the search query using the lexical affinities of the query terms that were found in the reference documents".

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B. Thai whose telephone number is 571-272-4029. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

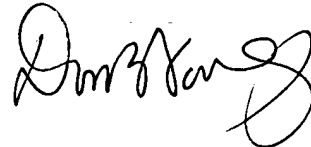
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Hanh B Thai
Examiner
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October 13, 2006

A handwritten signature in black ink, appearing to read "Don Wong", with a stylized, looping flourish at the end.

DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100